

KURANOV, I.F.; SHEKHTMAN, Yu.M.

Determining the yield of a well where there is horizontal fracturing
with fill material. Neft. khoz. 39 no.9:37-39 S '61.
(MIRA 15:1)

(Oil reservoir engineering)

EFROS, D.A. [deceased]; KURANOV, I.F.

Determination of relative permeabilities based on "external"
measurements in two-dimensional, radial flow. Trudy VNII
no. 37:70-86 '62. (MIRA 16:6)
(Oil sands—Permeability) (Oil field flooding)

KURBANOV, A.K.; KURANOV, I.F.

Effect of wettability on water drive. Nauch.-tekhn. sbor. po dob.
nefti no.24:47-54 '64. (HIRA 17:10)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy Institut.

KURBANOV, A.K.; KURBANOV, I.F.

Effect of capillary forces on water oil drive. Nauch.-tekhn. sbor.
po dob. nefti no.25:43-46 '64. (MIRA 17:12)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

KURBANOV, A.K.; KURANOV, I.F.

Effect of the permeability ratio of interlayers on the steadiness of the displacement of water-oil contact in a two-layer formation. Nauch. tekhn. sbor. po dob. nefti no.27:39-42 '65. (MIRA 18:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

KUNDIN, S.A.; KURANOV, I.F.

Hydrodynamic calculations of certain multiphase fluid flows.
Trudy VNII no.42:43-58 '65. (MIRA 18:5)

KURBANOV, A.K.; KURANOV, I.F.

Movement of the water-oil contact in a double-layer reservoir.
Trudy VNII no.42:93-111 '65. (MIRA 18:5)

KURANOV, I.N.

Double pipe riser systems with decentralised mixing. Vod. 1 san.
tekh. no.6:1-4 Je '58. (MIRA 11:5)
(Hot-water heating)

KURANOV, I.H.; KONDRAT'YEV, L.S.

Reasons for freezing of radiators. Vod. 1 san. tekhn. no.9:33-35
8 '58. (MIRA 11:10)

(Radiators--Cold weather conditions)

KURANOV, I.N.; NOVIKOV, S.N.; STESHENKO, A.L.

Installing industrial ventilation. Vod. i san. tekhn. no.6:37-39
Je '59. (MIRA 12:8)
(Czechoslovakia--Factories--Heating and ventilation)

OFITSKROV, Leonid Fedorovich; KURANOV, I.N., inzh., nauchnyy red.

[Single-pipe hot-water heating systems; vertical with directly coupled sections] Odnorubnye sistemy vodianogo otopenia; vertikal'nye s priamymi semykaiushchimi uchastkami. Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1960. 160 p. (MIRA 14:4)
(Hot-water heating)

KURANOV, I.N., inzh. [deceased]

Analysis and comparison of heating units. Vod. i san. tekhn.
no.6:6-10 Je '65. (MIRA 18:8)

SOV/112-58-3-4539

Translation from: Referativnyy zhurnal. Elektrotehnika, 1958, Nr 3, p 165 (USSR).

AUTHOR: Kuranov, I. V.

TITLE: Fundamental Nonstandard Mechanisms Used in the System of Automatic Lines Manufacturing Rubber Compounds at the "Uralkabel' " Plant
(Osnovnyye nestandartnyye mekhanizmy v sistemakh potочно-avtomaticheskikh liniy po izgotovleniyu rezinovykh smesey na zavode "Uralkabel' ")

PERIODICAL: Kabel'n. tekhnika, 1957, Nr 1-2, pp 13-18

ABSTRACT: Mechanized proportioning, weighing, and pouring of grainy materials, small batches and liquid softeners into the rubber-mixer chamber is described, as well as loading of cut lumps of various rubbers into the chamber.

Illustrations: 4.

Card 1/1

SOV/110-58-11-21/28

AUTHOR: Kuranov, I.V. (Engineer)

TITLE: Fuller Exploitation of (Cable-making) Machinery
(Metod ispol'zovaniya rezervov oborudovaniya).

PERIODICAL: Vestnik Elektropromyshlennosti, Nr.11, 1958, pp.67-70,
(USSR)

ABSTRACT: This article describes methods of increasing the output of cable-making machinery. The first machine considered is one which applies armouring tape or wire to a power cable. As the armouring unwinds from the reels of the machine they become lighter and could accordingly be made to run faster. Calculations are made of the change in centrifugal forces with the reels full and the reels empty, to indicate the speed increase that becomes possible as the armouring is unwound. An increase in output of 50% is envisaged. A curve showing the relationship between the speed of the armouring head and the weight is given in Fig.2. Similar arguments are then applied to a six-head machine for laying-up cable cores and it is considered that an increase in output of 37% can be

Card 1/2

Fuller Exploitation of (Cable-making) Machinery. SOV/110-58-11-21/28

achieved. In another machine of similar type an increase of 35% is claimed. Special automatic speed control is necessary for the machine. A schematic diagram of this electrical equipment is given in Fig.5 and its operation is described. The control does not appear to have been used in practice. There are 5 figures, 1 table.

SUBMITTED: February 3, 1958.

1. Electric cables--Production
2. Machines--Performance
3. Machines
--Automation
4. Control systems--Wiring diagrams

Card 2/2

SOV/110-58-11-23/28

AUTHOR: Kuranov, I.V. (Engineer)

TITLE: Reply to Discussion by V.Ye. Pashchenko and V.V. Zverev
(Otvét na zamechaniya V.Ye. Pashchenko i V.V. Zvereva).

PERIODICAL: Vestnik Elektromyshlennosti, Nr.11, 1958, pp.71-72,
(USSR).

ABSTRACT: Kuranov replies to the discussion by saying that in the cable industry there are many machines without paper-winding heads. A number of machines used in the manufacture of mass-impregnated cables could be speeded-up in the way described, even though they have paper winding heads; concrete examples are cited. As the acceleration of the machines is slow, inertia forces may be neglected in comparison with centrifugal forces.

1. Electric cables--Production 2. Machines--Performance

Card 1/1

SOV/110-59-6-6/24

AUTHORS: Kuranov, I.V., Engineer and Nechitalyuk, A.S., Engineer

TITLE: Operating Experience with an Automatic Flow Line for the
Manufacture of Rubber Mixtures (Ob opyite ekspluatatsii
potochno-avtomaticheskoy linii po izgotovleniyu
rezinovykh smesey)

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 6, pp 22-23 (USSR)

ABSTRACT: The first mechanised and automatic plant for the
preparation of rubber mixtures was developed in the
Uralkabel' works in Sverdlovsk in 1953-54. This article
describes operating experience with the plant and
modernisation of some parts of it. The automatic rubber-
mixing plant is illustrated in Fig 1 and all the main
components are listed. The effective length of the
line is 110 m, there are 70 mechanisms with 60 electric
motors and the installed power is 650 kW. The automatic
weighing-machine developed by the Uralkabel' works has
operated reliably since 1954 and weighing errors do not
exceed 0.4%. Formerly a skip hoist was used for
transporting the rubber and some fine materials, were
sometimes spilled where they were not wanted so causing

Card 1/3

Operating Experience with an Automatic Flow Line for the Manufacture
of Rubber Mixtures

SOV/110-59-6-6/24

defective output. It has been found better to use transporters both for loading the component and unloading the finished rubber mixtures. The original liquid-measuring equipment was found unsatisfactory and another one has been developed; it was described in the zhurnal NIIKP (Journal of the Scientific Research Institute of the Cable Industry), 1957, Nr 1-2. It is now proposed to introduce all minor components to the rubber-mixing chamber automatically in the liquid condition at a temperature between 60 and 90°C. A special force pump will automatically deliver definite amounts of material with an accuracy of 10 grams. Operating experience has shown that separate lines are required for sifting and drying each white powdery material. Each such line should have two sifting mechanisms and one dryer. There should be two lines for carbon black, one being a spare or able to operate on a different grade of carbon black. Special attention should be paid to the protective system and interlocks

Card 2/3

SOV/110-59-6-6/24

Operating Experience with an Automatic Flow Line for the Manufacture of Rubber Mixtures

to prevent plant operation if any component is defective. The automatic flow-line system is applicable to all rubber shops of the Cable and Rubber industries and its general introduction will result in considerable saving of labour. There is 1 figure and 1 Soviet reference.

Card 3/3

PHASE I BOOK EXPLOITATION

SOV/5165

Kuranov, Ivan Vasil'yevich, and Ivan Mikhaylovich Shepelev

Potochnyye avtomaticheskiye i poluavtomaticheskiye linii izgotovleniya
rezinovykh smesey; sovmeshchennyye tekhnologicheskiye protsessy (Automatic
and Semiautomatic Production Lines for Rubber Mixes; Combined Technological
Processes) Moscow, Gosenergoizdat, 1960. 87 p. 3,000 copies printed.

Ed.: A.Ye. Saakyan; Tech. Ed.: K.P. Voronin.

PURPOSE: This book is intended for designers, engineers, and other technical
personnel working in the cable, tire, and rubber industry.

COVERAGE: The book describes automatic and semiautomatic production lines for rubber
mixes, and the basic equipment used in conjunction with these lines. Samuil
Yakovlevich Mendlin, Chief Engineer, and Yevgeniya Andreyevna Krivosheyeva, rubber
technologist of the "Uralkabel'" Plant, are mentioned. There are 5 Soviet ref-
erences.

Card 1/3

KURANOV, I.V. [deceased]; SHEPELEV, I.M.; KURALOV, A.I.; POKHAY,
A.P., kand. tekhn. nauk, retsenzent

[Automation of equipment for the manufacture of cables and
industrial rubber production] Avtomatizatsiia kabel'nogo i
rezinotekhnicheskogo oborudovaniia. Moskva, Mashinostroenie,
1965. 371 p. (MIRA 18:5)

KURANOV, V.M.

Universal drill for making holes in floors in installing ventilating
grills. Biul. tekhn. inform. 4 no.5:27 My '58. (MIRA 11:8)

1. Glavnyy mekhanik SMJ-3 tresta No.16.
(Drilling and boring machinery)

137-58-6-11471

Translation from: Referativnyy zhurnal, Metallurgiya, 1956, Nr 6, p 31 (USSR)

AUTHOR: Kuratov, V.M.

TITLE: An Electronic Meter for Aggressive Liquids (Elektronnyy schetchik agressivnykh zhidkostey)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 16, pp 26-29

ABSTRACT: Descriptions are presented of volumetric flow meters for aggressive liquids designed by the Central Power Engineering and Automation Laboratory of the Noril'sk Mining and Metallurgical Kombinat based upon water-speed meters with vertical propeller for measurement of flows of 20-120 m³/hr (the ESI-1/40 instrument) and with a horizontal propeller for flows of 20-120 liter/min (the ESI-1/100 instrument). The set comprising either type of instrument consists of a pick-up, an electronic impulse amplifier, a command device with counter (in the ESD 1/40 instrument) or an integrating mechanism (in the ESI-1/100). The pick-up is a water-speed meter with vertical or horizontal propeller made of vinyl plastic in all cases. The other parts are also made of materials not affected by the medium being measured, such as hypochlorite or some other

Card 1/2

137-58-6-11471

An Electronic Meter for Aggressive Liquids

aggressive solution. Built into the rotor unit is a steel rod which, at each turn, i.e., when a given amount of liquid has escaped, intercepts the field of a permanent electromagnet and thus creates an impulse which is amplified by the electronic amplifier at the output of which an electromagnetic field is set up. In the case of the ESD-1/40 instrument the electromagnet acts upon a drum-type meter and an electric motor drive which closes and opens the shut-off valve on the pipe. In the case of the ESI-1/100 instrument the electromagnet actuates a meter only (including an integrating mechanism).

M.L.

1. Flowmeters--Design
2. Flowmeters--Equipment
3. Electronic equipment--Applications

Card 2/2

KURANOV, Vasilii Mikhaylovich; KARPOV, V.V., kandidat tekhnicheskikh nauk, redaktor; KAPLAN, M.Ya., redaktor; PUL'KINA, Ye.A., tekhnicheskiiy redaktor

[Mobile plastering unit] Peredvishnoi shtukaturnyi agregat.
Leningrad, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1955.
65 p. (Building machinery) (Plastering) (MLRA 9:2)

KURANOV, V.M.

Unit for making plaster mixes. Biul. tekhn. inform. 5 no.3:
28-29 Mr '59. (MIRA 12:7)
(Plaster)

KURANOV, V.N.

Decomposition of plant residues in soil [with summary in English].
Pochvovedenie no.3:78-82 Mr '61. (MIRA 14:3)

1. Kostromskoy sel'skokhozyaystvennyy institut.
(Humus)

KORNILOVA, A.L., veterinarnyy vrach; KURANOV, Yu.P., kandidat biologicheskikh nauk.

Detection of Negri bodies on smears in diagnosing rabies. Veterinariia
32 no.10:84-85 O '55. (MIRA 8:12)

1. Novosibirskaya oblastnaya vetbaklaboratoriya (for Kornilova). 2. NIVOS
(for Kuranov).
(RABIES--DIAGNOSIS) (BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

VASIL'KOV, G., kand.veterinarnykh nauk; POLYKOVSKIY, M.D.; KUDRYAVTSEV, A.A.;
MAMADZHANOV, I.; MOLDABAYEV, Zh.; LAVRENT'YEV, M.; KHERUVIMOV, V.P.;
KURANOV, Yu.

Throughout the Soviet Union. Veterinariia 37 no.4:91-96 Ap'60
(MIRA 16:6)

1. Uchenyy sekretar' veterinarnoy sekti Vsesoyuznoy akademii
sel'skokhozyaystvennykh nauk imeni Lenina (for Vasil'kov).
(VETERINARY RESEARCH) (VETERINARY MEDICINE)
(VETERINARY HYGIENE)

Khrenov

ZAV'YALOV, A.N.; KURANOVA, A.V.

Removal of oxidizable matter from acetic acid. Gidroliz. i lesokhim.prom.
13 no.7:17-20 '60. (MIRA 13:10)

1. Dmitriyevskiy lesokhimicheskiy zavod.
(Acetic acid) (Wood distillation)

AKODUS, V.Ya.; GERGERT, I.E.; KURANOVA, A.V.

Decontamination of wastes from acetic acid manufacture with a simultaneous production of building materials. Gidroliz. i lesokhim. prom. 16 no.1:16-19 '63. (MIRA 16:2)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy lesokhimicheskoy promyshlennosti (for Akodus). 2. Opytnyy zavod Gosudarstvennogo vsesoyuznogo nauchno-issledovatel'skogo instituta tsementnoy promyshlennosti (for Gergert). 3. Dmitriyevskiy lesokhimicheskiy zavod (for Kuranova).
(Acetic acid) (Factory and trade waste) (Building materials)

PIGULEVSKIY, G.V., KURANOVA, I.I.

Ammonia

Reaction of ammonia with an oxide of oleic acid. Dokl. AN SSSR 82, No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.
2

n KURANOVA, I.L.

Kuranova, I.L. -- "Investigation of Oxides of Higher Unsaturated Fatty Acids." Chem Sci, Leningrad State U, Leningrad 1953. (REFERATIVNIY ZHURNAL--KIMIYA, No 1, Jan 54.)

Source: SUM 168, 22 July 1954

✓ Reaction of ammonia with the oxide of elaidic acid. G.
V. Pliginskii and L. I. Kuz'mova. *J. Gen. Chem. U.S.S.R.*
S.S. 24, 1971, 2105-2107. (1971) - See C.A. 46, 66-11.
INDEX

2

U.S.S.R.

Reaction of ~~pyridine~~ with the salts of elaidic acid
~~1. Pyridine salt of elaidic acid (I) (from 1954)~~

Табл. 1. ~~pyridine~~ соединений.

2. ~~Concluded~~ ~~from 1954~~ ~~from 1954~~
 27000. Treatment of 85.3 g elaidic acid with 100 ml
 (100) contg. 0.2 g. active O₂ gave 95% elaidic acid (I).
 m. 55-55.5°. Heating 2 g. I with 15 ml. 45% aq. NaOH in
 sealed tube 12 hrs. at 150° gave after combining 3 runs and
 evap. the soln. 18.7 g. 9-amine-10-hydroxyelaidic acid (II),
 m. 158-159° (from tan-AcOH); oxidation of this with NaIO₄
 gave NH₄. Oxidation of II with PhIOAc₂ gave polymer to
 100% and in the acid (the ratio for hydrolysis of 100%
 contg. intermediate with alc. MeOH). II yield 40% in
 m. 144-45°. II in MeOH with dry PCl₅ gave after 2 hrs. re-
 fluxing 60% II. ~~Mo ester HCl salt~~ m. 65-6° (from 100% a.
 II does not form a complex with Cu. G. M. L.

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KRUPIN, G.V.; BELYAYEV, I.T.; LAPSHIN, A.A.; GORDEYEV, N.I.; MAR'YANOVSKIY, I.M.; PAVLOV, B.V.; ZHILOV, S.N.; TSYPKIN, S.I.; ANDREYEV, N.N.; KAZIMIROVA, V.F.; KURANOVA, I.I.; PIGULEVSKIY, G.V.

Annotations of the scientific research work performed at the institute in 1957. Trudy LTIKHP 15:213-227 '58.

(MIRA 13:4)

1. Leningradskiy tekhnologicheskoy institut kholodil'noy promyshlennosti. 2. Kafedra tekhnologicheskogo oborudovaniya pishchevykh proizvodstv (for Krupin, Lapshin, Pavlov). 3. Kafedra ekonomiki i organizatsii proizvodstva (for Belyayev). 4. Kafedra detaley mashin i pod'yemno-transportnykh mashin (for Gordeyev). 5. Kafedra grafiki (for Mar'yanovskiy). 6. Kafedra promyshlannoy teplo tekhniki (for Zhilov). 7. Kafedra fiziki (for Tsyppkin). 8. Kafedra fizicheskoy kolloidnoy i organicheskoy khimii (for Andreyev, Kazimirova, Kuranova, Pigulevskiy).

(Refrigeration and refrigerating machinery)

(Chemistry, Technical)

5 (3)

AUTHORS:

Pigulevskiy, G. V., Kuranova, I. L.,
Shenin, Yu. D.

SGV/79-29-7-77/63

TITLE:

Reaction of Ammonia With the Oxide of the Petroselaidic Acid
(Vzaimodeystviye ammiaka s okis'yu petrozelaidinovoy kisloty)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2449-2452 (USSR)

ABSTRACT:

In addition to previous papers (Refs 1, 2) the authors investigated the reaction of ammonia with the oxide of the petroselaidic acid (trans- Δ^6 -octadecenoic acid-1). This acid was obtained by elaidination of the petroselinic acid. By oxidation of this acid with peracetic acid the oxide was formed. By reaction of ammonia with this oxide at 130° the oxy-amino-stearic acid was formed, which melted after repeated recrystallization from isoamyl alcohol at 189-190° (in sealed tube) and corresponds with the empirical formula $C_{18}H_{37}O_3N$. It is insoluble in common solvents, sparingly soluble in isoamyl alcohol and soluble only in acids and alkali liquors. According to the structural proofs carried out [oxidation with lead tetraacetate (Ref 3)] formula (I) is assigned to the oxy-amino-stearic acid. It is a stereoisomer of the corresponding oxy-amino acid which results from the oxide of

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Reaction of Ammonia With the Oxide of the
Petroselaidic Acid

304/79-29-7-77/83

the petroselinic acid. The following derivatives of the oxy-amino-stearic acid which was obtained from the oxide of the petroselaidic acid were synthesized: the hydrogen chloride complex of the oxyamino acid ($C_{16}H_{35}O_3NH_2 \cdot HCl$) and the hydrogen chloride complex of its methyl ester (II). It can be seen from the table that the melting points of the oxy-amino acid and its derivatives which were obtained from the oxide of the petroselinic acid (cis-isomer) are lower than the melting points of the oxy-amino acid and its corresponding derivatives which were produced from the oxide of the petroselaidic acid (trans-isomer). Similar observations were made earlier when comparing the properties of two other oxy-amino-stearic acids which were produced by the authors, accordingly, from the oxides of the oleic acid (cis-isomer) and elaidic acid (trans-isomer) (Ref 1). In both cases the oxy-amino acids are distinguished from one another by their steric configuration. There are 1 table and 8 references, 5 of which are Soviet.

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Reaction of Ammonia With the Oxide of the
Petroselaidic Acid

SOV/79-29-7-77/83

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State
University)

SUBMITTED: July 2, 1958

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5(3)

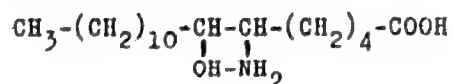
SOV/80-32-4-46/47

AUTHORS: Pigulevskiy, G.V., Kuranova, I.L. and Sokolov, E.V.

TITLE: The Interaction of Ammonia With the Oxide of Petroselinic Acid (Vzaimodeystviye ammiaka s okis'yu petrozelinovoy kisloty)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 4, pp 937-938 (USSR)

ABSTRACT: The authors synthesized the oxyaminostearic acid by means of interaction of ammonia with the oxide of petroselinic acid. On the basis of treatment this acid with lead tetraacetate and the analysis of the products resulting from the reaction, the authors conclude that the oxyaminostearic acid should have the structure of 6-amino-7-oxyoctadecanoic acid of the following form:



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SOV/80-32-4-46/47

The Interaction of Ammonia With the Oxide of Petroselinic Acid

Its melting point is $133 - 134^{\circ}\text{C}$. The detailed procedure of obtaining this acid was described in the note.

There are 7 references, 3 of which are Soviet, 2 German, 1 American and 1 French.

SUBMITTED: July 2, 1958

Card 2/2

KURANOVA, I.L.; SMENIN, Yu.D.; FIGULEVSKIY, G.V.

Reactions of methyl ester oxide of erucic acid with acetic acid.
Zhur.ob.khim. 31 no.9:3142 S '61. (MIRA 14:9)

1. Leningradskiy gosudarstvennyy universitet imeni A.A.Zhdanova.
(Erucic acid) (Acetic acid)

KURANOVA, I.L.; SHENIN, Yu.D.; PIGULEVSKIY, G.V.

Oxides of higher unsaturated acids. Reaction of oxide of
erucic methyl ester with acetic acid. Zhur.ob.khim. 32
no.5:1675-1680 My '62. (MIRA 15:5)

1. Leningradskiy gosudarstvennyy universitet.
(Erucic acid) (Acetic acid)

KURANOVA, I.L.; PIGULEVSKIY, G.V.

Preparation of a liquid isomer of methyl ester of linoleic
acid dioxide. Zhur.ob.khim. 32 no.10:3455 0 '62. (MIRA 15:11)

1. Leningradskiy gosudarstvennyy universitet.
(Linoleic acid)

KURANOVA, I.L.; SEMIN, Yu.D.

Method of preparing higher unsaturated acid oxides. Zhur.
prikl.khim. 35 no.5:1155-1157 My '62. (MIRA 15:5)
(Acids, Organic)
(Oxides)

KURANOVA, I. L.

"The structure of the 9,12 diepoxy stearic acid."

report submitted for the 1st World Fat Cong, Intl Soc for Fat Research, Hamburg,
W. Germany, 12-18 Oct 64.

KURANOVA, I.L.; SHENIN, Yu.D.; FIGULEVSKIY, G.V. [deceased]

Oxides of higher fatty unsaturated acids. Part 5: Interaction of oxides of petroselinic and petroselaidic acid methyl esters with acetic acid. Zhur. ob. khim. 34 no.10:3487-3493 0 '64. (MIRA 17:11)

1. Leningradskiy gosudarstvennyy universitet.

KURANOVA, I.P.; SMIRNOVA, N.V.

Preparation of Ph-iodogramicidin S. Izv. AN SSSR. Otd.khim.nauk
no.6:1148 Je '63. (MIRA 16:7)

1. Institut kristallografii AN SSSR.
(Antibiotics)

Handwritten: A. A. A. A. A.

79-2-26/64

AUTHORS: Akinova, L. I. , Kuranova, I. P. , Gavrilov, N. I.

TITLE: On the Models of Protein Microstructure (O modelyakh mikrostruktur belka) III. On the Structure of Phenylalaninanhydride Derivatives (III. O strukture proizvodnykh fenilalaninangidrida)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 398 - 403 (USSR)

ABSTRACT: In the preceding report it was shown that the formation of N-aminoacyl derivatives of phenylalaninanhydride takes place especially smoothly and with a good yield, when the phenylalaninanhydride is acted upon by chlorine anhydrides of amino acids (reference 1). Formerly, in the investigation of the behavior of N-aminoacyl derivatives of glycine anhydride, their extraordinary stability in an alkaline medium and a peculiar behavior toward the influence of hydrazine were emphasized (reference 2). This resulted in the following: 1) The addition of hydrazine to the CO-groups of the phthalyl protection in the performance of the reaction in the cold in ether or alcohol; 2) the splitting off of the phthalyl group on heating in alcohol and 3) the splitting of the diketopiperazine ring with the formation of phthalyltripeptide-hydrazide, without a breaking of the acyl bond. In the present work the properties of the phenylalaninanhydride derivatives were investigated and their easy hydrolyzation under the influence of aqueous and alcoholic

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79-2-26/64

On the Models of Protein Microstructure. III. On the Structure of Phenylalanine-anhydride Derivatives

alkali-solutions and hydrazine was shown. Thus the influence of the aminoacid composition, as well of the anhydride as of the acyl group upon the properties of these derivatives was for the first time observed in the example of the aminoacyl derivatives of two anhydrides (glycine anhydride and phenylalanine anhydride). The influence exerted by the aminoacid composition upon the stability of the N-aminoacyl- as well as the acyclic bonds was noticed in the investigation of the properties of the aminoacid anhydride derivatives synthesized by the authors. It was found that the stability of the cyclic bond in aminoacyl anhydrides is not only dependent on the aminoacid composition of the anhydride but also on the amino acids which are contained in the amine-acyl-side group. In contrast to the easily decomposing aminacyl derivatives of phenylalanineanhydride the same glycine anhydride derivatives (according to their aminoacid composition of the aminacyls) are extremely stable. Thus the stability of the NH-CO-linkage is different in an isolated cycle and in a cycle with the N-aminoacyl linkage and depends on the amino acids which are contained in the cycle of the aminoacyl group. The stability of the N-acyl- and N-aminoacyl linkages directly depends on the aminoacid composition of the anhydride. It becomes especially obvious in the investigations of the interaction

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On the Models of Protein Microstructure. III. On the Structure of Phenylalanine-anhydride Derivatives

75-2-25/64

products of the anhydride derivatives with hydrazine. The N-aminoacyl form of the linkage, as one of the chemical compounds of diketopiperazine with amino acids and their derivatives, cannot be investigated separately, isolated from the amino acids which participate in their formation. Summary: 1) The synthesis of the N-aminoacyl derivatives of the phenylalanine anhydrides was described: N,N'-di-phthalyl glyceryl- and N,N'-di-phthalylalanyl-phenylalanyl-anhydride. 2) The earlier expressed assumption on the mechanism of the elimination of the N-aminoacyl group from these compounds under the influence of hydrazine was confirmed. 3) The authors investigated their behavior under the conditions of the biuret reaction of protein (4 % NaOH). The authors showed their decomposition under the influence of alkali, to phthaloylglycyl-phenylalanyl-phenylalanine and phthaloyl-alanyl-phenylalanyl-phenylalanine. 4) On the basis of titration values (according to Vil'shtetter) a decomposition scheme of N,N'-di-phthalylvalyl-phenylalanine anhydride under the influence of alkali was suggested. There are 1 table, and 4 references, all of which are Slavic.

Card 3/4

On the Models of Protein Microstructure. III. On the Structure of Phenylalanin-
anhydride Derivatives

79-2-26/54

ASSOCIATION: Moscow State University
(Moskovskiy gosudarstvennyy universitet)

SUBMITTED: January 7, 1957

AVAILABLE: Library of Congress

Card 4/4

BOTVINIK, M.M.; KURANOVA, I.P.

Fermentation synthesis of optically active peptides from racemic amino acids. Part 3: Synthesis of L-tryptophan peptides from carbobenzoxy-D,L-tryptophylglycolic acid. Zhur.ob.khim. 32 no.1: 16-19 Ag '60. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Peptides) (Tryptophan) (Glycolic acid)

BOTVINIK, M.M.; KURANOVA, I.P.

Reaction of p-nitrophenyl ester of carbobenzoxy-D-phenylalanine
with chymotrypsin. Dokl. AN SSSR 143 no.5:1094-1097 Ap '62.
(MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom A.N.Nesmeyanovym.

(Alanine) (Esters) (Trypsin)

KASHKAROV, A.K.; KURANOVA, L.I., red.; PYLAYEVA, L.N., red.;
SOROKINA, Z.I., tekhn. red.

[Efficient utilization of alfalfa sod under cotton] 0
polnotsennom ispol'zovanii plasta liutserny kul'turoi
khlopchatnika. Tashkent, SoiuzNIKHI, 1962. 189 p.
(MIRA 17:1)

PANKOV, Mikhail Aleksandrovich; KURANOVA, L.I., red.; SOROKINA,
Z.I., tekhn. red.

[Processes of the salinization and desalinization of soils in
the Golodnaya Steppa] Protsessy zasoleniia i rassoleniia pochv
Golodnoi stepi. Tashkent, In-t pochvovedeniia, 1962. 342 p.
(MIRA 15:7)

(Golodnaya Steppe--Saline and alkali soils)

ASTAKHOVA, L.N.; UTMITSKAYA, P.M.; LEVINA, T.A.; KURANOVA, L.K.;
VODYANNIKOVA, A.A.; SUCHIL'NIKOVA, N.A.; MYL'NIKOVA, N.Yo.;
LYUBOVITSKAYA, V.Z.

Separability of the polio-myelitis virus in those inoculated
with live attenuated vaccine. Vop. virus 7 no.1:121 Ja-F '62.
(MIRA 15:3)

1. Sverdlovskiy institut po profilaktike poliomyelita.
(POLIOMYELITIS VACCINE)

SEMENOV, B.F.; KARASEVA, P.S.; KURANOVA, L.K.; SALANOVA, T.A.

Postvaccinal and postinfection immunity in tick-borne
encephalitis. Vop. virus. 9 no.5:597-601 S-O '64.

(MIRA 18:6)

1. Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov.

Obtaining cell-free liquid from *Azotobacter* cultures
A. A. Imshenetskiĭ, L. I. Solntseva, K. Z. Perova, and N. F.
Kuranova (Inst. Microbiol., Acad. Sci. U.S.S.R., Moscow).
Mikrobiologiya 25, 104-70 (1956).—For high N-fixing
capacity *A. chroococcum* should be cultured in thick, non-
nitrogenous media; sugar utilization is then complete in 21
48 hours. All tested cultures had about the same capacity,
17.8-18.1 mg. N/g. of glucose. The best method for de-
stroying the *Azotobacter* cells is grinding with Al_2O_3 . For a
mucilaginous consistency of the cell-free liquid it is best to
centrifuge in water, which may be phosphate buffered; the
centrifuged liquid is not totally cell-free. J. F. Smith

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927620003-2"

17(2,10)

AUTHORS:

Imshenetskiy, A. A., Corresponding Member AS USSR, Solntseva, L.I.,
Kuranova, N. F. SOV/20-124-4-56/67

TITLE:

Experimental Generation of Active Variants of Citric-Acid-Producing
Aspergillus Niger (Eksperimental'noye polucheniye aktivnykh
variantov Aspergillus niger, obrazuyushchikh limonnuyu kislotu)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 925-927 (USSR)

ABSTRACT:

It is a well-known fact that micro-organism mutants produced by the influence of radiant energy possess, as a rule, reduced biochemical activity. Some of them belong to the sublethal variants and perish on transplantation, others show definite signs of degeneration, form only small colonies, grow slowly, partially or totally lose the activities of various ferment systems, etc. The development of mutants that possess more active ferment complexes, or that effect the biosynthesis of certain substances more intensively than the initial form does, are comparatively rare. However, these mutants are of particular interest. In the course of these 10 years it has been possible to produce, by the employment of radiant energy in bacteria, yeast and mold fungi, a number of practically utilizable mutants (e.g. Penicillium chrysogenum with a penicillin quantity of 100 times that of the wild initial form).

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SOV/20-124-4-56/67

Experimental Generation of Active Variants of Citric-Acid-Producing
Aspergillus Niger

Citric acid is obtained from a culture of *Aspergillus niger*, which latter oxidizes saccharose into the acid. As the currently used strains of *Aspergillus* did not include any irradiation-produced variants, the authors studied the physiology of the variants produced by means of ultraviolet light irradiation. The initial culture was the 6/5 developed in the Leningradskiy zavod limonnoy kisloty (Leningrad Plant for Citric Acid). The 1-conidial cultures obtained from it had the same activities with regard to the production of the acid as the initial culture. The cultivation of one of the former was continued. The study of this capacity in individual mutants has facilitated the selection of the most promising cultures (T_1 , T_2 , and X), all of which produced more acid than the initial culture had done. They developed after the administration of 4 doses of ultraviolet irradiation. Their genealogies are shown in figure 1. Mutant T_1 differed also with regard to morphology.

Table 1 shows the formation dynamics of citric acid. From this the following conclusions are derived: (1) The mycelium dry weight of mutant T_1 is 25-30 % lower than that of the initial form. (2) Per

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1 g dry mycelium, the ultraviolet mutant consumes 26-51 % more

Experimental Generation of Active Variants of Citric-Acid-Producing
Aspergillus Niger

SOV/20-124-4-56/67

sugar than the initial form does. (3) Per 1 g dry mycelium, the mutant forms 46-84 % more citric acid than the initial form does. The absolute acid quantity is 16-22 % higher in the mutant culture medium. (4) The citric acid yield, calculated per sugar consumed, varies with the age of the culture, and is 50.7-63.4 % in the initial culture, and 57.7-74.3 % in the mutant. As is the case in the initial strain, the mutants produce almost exclusively citric acid. The above mentioned increased acid yield cannot be explained by a lower sugar consumption for mycelium formation, and is dependent on the biochemical activity of the culture. -There are 1 figure and 1 table.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR
(Institute of Microbiology of the Academy of Sciences, USSR)

SUBMITTED: October 30, 1958

Card 3/3

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; KUMANOVA, N.F.

Experimental variability of *Aspergillus niger*. Part 1: Morphological characteristic of variants obtained as a result of the action of ultraviolet rays. Mikrobiologiya 29 no.2:177-183 Mr-Apr '60.

(MIRA 14:7)

1. Institut mikrobiologii AN SSSR.

(ASPERGILLUS)

(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; KURANOVA, N.F.

Experimental variability of *Aspergillus niger*. Report No.2: Formation of citric acid by variants of *Asp. niger* obtained through ultraviolet irradiation. Mikrobiologiya 29 no.3:351-357 My-Jo '60. (MIRA 13:7)

1. Institut mikrobiologii AN SSSR.

(*ASPERGILLUS NIGER*)

(CITRIC ACID)

(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

IMSHENETSKIY, A.A., akademik; SOLNTSEVA, L.I.; KURANOVA, N.F.

Polyploid yeastlike fungi from the genus Candida. Dokl. AN SSSR
152 no.1:212-215 S '6). (MIRA 16:9)

1..Institut mikrobiologii AN SSSR.
(Candida (Fungus)) (Polyploidy)

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; KURANOVA, N.F.

Effect of external factors on the mutants of *Aspergillus niger*.
Mikrobiologiya 32 no.4:616-622 J1-Ag '63. (MIRA 17:6)

1. Institut mikrobiologii AN SSSR.

NIKITIN, Mikhail Nikitich; KURANOVA, N.V., retsentsent; SEGAL', N.M., red.;
KOGAN, V.V., tekhn.red.

[Working principle and operation of machines used in the
preparatory processes of wool weaving] Ustroistvo i obsluzhivanie
mashin prigotovitel'nogo otdela sherstotkachestva. Moskva, Gos.
nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1957. 286 p.
(MIRA 11:1)

(Woolen and worsted manufacture)

18(3,5)

AUTHOR:

Tatanov, D.P., and Kuranova, N.V., Engineers

SOV/128-59-8-10/29

TITLE:

Pressure Die-Casting of Complicated Aluminum Alloy Parts

PERIODICAL:

Liteynoye proizvodstvo, 1959, Nr 8, p 23 (USSR)

ABSTRACT:

Twelve complicated components of the hydro-transmission in the "Volga" car are manufactured by pressure die-casting and weigh from 0.003 to 4.0 kg. For this purpose a special aluminum alloy was developed which consists of 1.5 - 2.0% Cu, 7.0 - 9.5 % Si, 0.20 - 0.33 % Mg, 0.5 - 1.5 % Fe, less than 1.0% Zn, less than 0.5 % Mn, less than 0.5 % Ni and the rest aluminum. The mechanical features of this alloy are as follows: $\sigma_b = 40 - 22 \text{ kg/mm}^2$, $\delta = 0.4 - 0.6\%$, $a_k = 0.15 - 0.16 \text{ kgm/cm}^2$, $N_v = 100$. The pressure die-casting was done with the casting machine "Polak - 2255" which works with a pressure of 1090 kg/cm². There is 1 photograph.

Card 1/1

KURANOVA, P.Z.; LARIONOVA, Ye.S.; PLOTNIKOV, P.M.; PUMPYANSKIY, A.Ya.;
SOBETS, L.P.; SOBOLEV, A.T.; IL'INSKIY, N.A., spetsred.;
SHCHERBAKOVA, G.V., red.; YAROV, E.M., tekhn.red.

[Mechanized assembly-line production of sweet rusk; experience
of the Leningrad Port Mechanical Bakery] Mekhanizirovannoe
potochnoe proizvodstvo sдобnykh sukharey; opyt Leningradskogo
Portovogo khlebozavoda. Moskva, Pishchepromizdat, 1956. 31 p.
(MIRA 11:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
khlebopekarnoy promyshlennosti.
(Leningrad--Bakers and bakeries--Equipment and supplies)

Metody Matematicheskoi Fiziki,
Metody Matematicheskoi Fiziki (Tom Vtoroi) (Methods of Mathematical Physics-Vol. 2),
544 p., Moscow and Leningrad, 1951.

MARKMAN, A.L., doktor khim. nauk; KATS, B.A.; KURANT, B.V.

Cottonseed oil industry of Uzbekistan during the last forty years.
Masl.-zhir. prom. 23 no.11:26-30 '57. (MIRA 11:1)
(Uzbekistan--Cottonseed oil)

KURANTSEVA, Ye.G. (Irkutsk)

Case of primary sarcoma of the heart. Klin.med. 39 no.17140-142
Ja '61. (MIRA 14:1)

1. Iz kafedry gosspital'noy terapii (zav. - dotsent K.R. Sedov)
Irkutskogo meditsinskogo instituta (dir. - prof. A.I. Nikitin)
(HEART--TUMORS)

KURAPIN, B.S.; KAZAKOV, A.A.

All-Union Conference on the Production of Semikilled Steel. Metallurg
6 no.6:18-19 Je '60. (MIRA 14:5)

1. Stalinskiy filial Ukrainskogo instituta metallov.
(Smelting--Congresses)

S/130/61/000/006/001/004
A006/A101

AUTHORS: Kurapin, B. S., Kazakov, A. A.

TITLE: All-Union Conference on the production of semi-killed steel

PERIODICAL: Metallurg, no. 6, 1961, 18 - 19

TEXT: Although the manufacture of semi-killed steel is increasingly developing abroad, in particular in the USA, this steel grade was until the present produced in the USSR only in inconsiderable amounts. From 1959 to 1960 a number of metallurgical plants and scientific research institutes were charged to develop the technology and assimilation of semi-killed steel production in the Soviet Union. Experiences gathered in this field have been exchanged during an All-Union Conference organized by the Ukrainian Scientific Research Institute of Metals and the Stalino Sovnarkhoz at Stalino from January 31, to February 2, 1961. The Conference heard 16 reports on the results of investigations obtained by a number of plants and organizations, including, Azovstal', the Krivoy Rog and Makeyevka Plants, the KMK, the Zhdanov Plant imeni Il'yich, Plant imeni Dzerzhinskiy, the Dnepropetrovsk Metallurgical Institute, etc. Mechanical and chemical methods of converting rimming into semi-killed steel had been developed and sav-

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All-Union Conference on the production of ...

S/130/61/000/006/001/004
A006/A101

ings in head crops amounting from 2 to 10% had been achieved in the manufacture of semi-killed steel sheets, rails, reinforcement fittings, and roll metal containing 0.05 - 0.5% C. A technology was developed for the production of bottle molds for the teeming of rimming steel. The Conference recommended a technology for semi-killed steelmaking which differs from rimming or killed steel manufacture merely by the deoxidation method. For the manufacture of semi-killed steels with over 0.25% C deoxidation should be performed by adding into the ladle ferro-silicon (in an amount calculated for 0.05 - 0.12% Si in the finished steel) and aluminum (100 - 300g/t). Deoxidation is corrected by the addition of aluminum shot into the mold or the feed trumpet. For the production of steel with C below 0.25%, ferrosilicon is added in an amount assuring 0.05 - 0.12% Si in the finished steel and Al 300 - 500 g/t. The chemical method of converting rimmed into semi-killed steel during syphon casting should be conducted by adding 45% Al or 75% ferrosilicon into the molds. When teeming Cr 3kp (St.3kp) steel, the de-oxidizers for the chemical conversion are added in the following approximate amounts: 150 - 200 g/t Al and 300 - 400 g/t 75%-Fe-Si. For the conversion of 0.8kpCr.1 (0.8kp St.1) and Cr 2kp (St.2kp) rimming steels 250 - 300 g/t aluminum must be added. The mechanical method of converting the rimming steel is performed by teeming the steel into bottle-shaped molds using spherical lids. The

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All-Union Conference on the production of ...

S/130/61/000/006/001/004
A006/A101

Conference stated that the main causes preventing the introduction of semi-killed steels into Soviet industry, is the lack of demand and deficiency in Al shot. It is recommended to accelerate the assimilation of this steel by using it as a substitute for a number of killed steels and to complete and modify the GOST standards in such a manner that semi-killed steels should be employed in all steelmaking methods.

ASSOCIATION: Stalinskiy filial Ukrainskogo instituta metallov (Stalino Branch of The Ukrainian Institute of Metals)

Card 3/3

SHNEYEROV, Ya.A., kand.tekhn.nauk; DERFEL', A.G., kand.tekhn.nauk; KOTIN,
A.G., kand.tekhn.nauk; Prinimali uchastiye: ZAYTSEV, I.A.; KURAPIN,
B.S.; LEVITASOV, Ya.M.; SUKACHEV, A.I.; TRET'YAKOV, Ye.V.; UMNOV,
V.D.; SHUKSTUL'SKIY, I.B.

Reducing the consumption of ferromanganese in the making of open-
hearth steel. Trudy Ukr. nauch.-issl. inst. met. no.7:103-114
'61. (MIRA 14:11)
(Steel--Metallurgy) (Ferromanganese)

MEDZHIZHESKIY, M.Ya., doktor tekhn. nauk; KURAPIN, B.S.; GEYNEMAN, A.V.;
IVORYANINOV, V.A.; MOISEYENKO, A.I.; KOSHCHEV, V.Ya.

Nitrogen-content in the metal during the blowing of the
open-hearth furnace bath with compressed air. Met. i
gornorud. prom. no.6:23-26 N-D '65. (MIRA 18:12)

KULIKOV, V.O.; BORNATSKIY, I.I.; ZARUBIN, N.G.; DOROFEEV, G.A.;
KALUZHSKIY, Ye.A.; KAZAKOV, A.A.; KOVAL', R.F.; KORNEVA, N.K.;
TRET'YAKOV, Ye.V.; TRUNOV, Ye.A.; Prinsipal'nyy uchastiyets: ANDREYEV, V.I.;
GORDIYENKO, V.V.; GRINEVICH, I.P.; GUBAR', V.F.; DOLINENKO, V.I.;
ZHERNOVSKIY, V.S.; ZHIGALOVA, Z.I.; KOMOV, N.G.; KURAPIN, B.S.;
OLESHKEVICH, T.I.; PRIKHOZHENKO, Ye.

Mastering the operations of 650- and 900-ton (mega - gram) capacity
open-hearth furnaces at the Il'ich metallurgical plant. Stal' 25
no.8:805-807 S '65. (MIRA 18:9)

1. DONNIICHERMET 1 Zhdanovskiy metallurgicheskiy zavod imeni Il'icha.

BABAYANTS, A.A., inzh.; KURAPOV, A.F., tekhnik

Stand for mounting the manipulator on a car. Shakht., stroi. 7 no.1:
26 Ja '63. (MIRA 16:2)

1. KuzNIIshakhtostroy.
(Mine railroads—Cars)

CAVRILOV, Anatoliy Nikolayevich; POLYAKOV, N.I., professor, retsenzent;
KURAPOV, A.N., kandidat tekhnicheskikh nauk, redaktor; PETROVA,
I.A., redaktor; ZUDAKIN, I.M., tekhnicheskiiy redaktor.

[Technology of manufacturing parts for airplane instruments]
Tekhnologiya izgotovleniya detalei aviatsionnykh priborov.
Moskva, Gos. izd-vo obor. promyshl. 1956. 386 p. (MIRA 9:6)
(Astronomical instruments)

KURAPOV, A. N.

PHASE I BOOK EXPLOITATION

761

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti

Avtomatizatsiya i mekhanizatsiya protsessov proizvodstva v priborostroyeni
(Automation and Mechanization of Production Processes in Instrument
Manufacturing) Moscow, Mashgiz, 1958. 591 p. 8,500 copies printed.

Ed.: Gavrilov, A. N., Doctor of Technical Sciences, Professor; Reviewer:
Vladziyevskiy, A. P., Doctor of Technical Sciences; Ed. of Publishing House:
Kochetova, G. P., Engineer; Tech. Ed.: Model', B. I.

PURPOSE: This book is intended for engineers, technicians, and scientific personnel concerned with mechanization and automation of production processes in instrument manufacturing, and for students and teachers of this subject in vtuzes.

COVERAGE: The book describes the characteristic features of the present state of mechanization and automation of production processes in the instrument industry. Part 1. describes the planning of automation means, the theory of precision, economic efficiency under automated production conditions, and also

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Automation and Mechanization of (Cont.)

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the theory and practice of overall mechanization and automation. Parts 2, 3, and 4 discuss : the most characteristic and effective methods and means of automation and mechanization in all stages of instrument manufacturing. No personalities are mentioned. There are no references.

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